A Proposal to Harvest Mission Assurance Efficiencies Through Alternate-Grade Parts Data Sharing

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*Alternate-Grade = automotive, COTS, industrial, medical, military

Harvest Mission Assurance Efficiencies Through Alternate-Grade* Parts Data Sharing

- Rapidly-evolving national needs for resilient missions, economic motivations, and technology developments in the global supply chain have drawn increased attention to using alternate-grade parts in space systems
- While these parts can offer significant cost, capability and availability benefits, procurers must often "qualify" them since their space performance (e.g., radiation tolerance) is unknown
- This practice, while necessary, can be duplicative, costly and timeconsuming, eliminating the benefits that made the parts attractive in the first place
- SMC, supported by Aerospace, is initiating a dialog on sharing of nonproprietary alternate-grade parts data to harvest cost, schedule and mission assurance efficiencies
 - Eliminates duplicative testing efforts
 - Accelerates design, manufacture and deployment of resilient, less costly systems

Alternate-Grade Parts Data Repository Notional Concept Sponsor Other SACE & MISSILE SYSTEMS CHIEF **Entities** ATMENT OF DE Proprietary / Conflict of Interest Filter

Data repository helps all stakeholders save development and production costs and delivers essential resilient systems to the government more quickly

Invitation and Call to Action – We Need YOU



Name & E-mail	Affiliation	Data You Want (e.g., DPA, Radiation, Construction, CSAM, CT Scan, Temperature, Chemical, Electrical, other)

Key Questions... Your Thoughts?



- 1. What minimum data (e.g., tests, characterizations, analyses, information) do you feel you need in order to gain confidence in Alternate-Grade parts for use in your applications?
 - a. Do you feel that the data that you need to get comfortable with alternate grade parts is readily available?
 - b. If not, do you employ other system level robustness strategies to mitigate this lack of data? Would you be able to save development and production costs if the data was available?
- 2. If a credible, controlled library of Alternate-Grade parts data was available, would you use it?
- 3. When would you like to meet one-on-one to discuss further?